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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,375	05/23/2006	Walter Stieglbauer	STIEGLBAUER ET AL 5 2072 PCT 2072	
25889 COLLARD & I	590 05/28/2009 OE, P.C.		EXAMINER	
1077 NORTHE	RN BOULEVARD		NGUYEN, HUNG D	
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			3742	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/580,375	STIEGLBAUER ET AL.				
Office Action Summary	Examiner	Art Unit				
	HUNG NGUYEN	3742				
The MAILING DATE of this communication app	pears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period variety or period for reply within the set or extended period for reply will, by statute. Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>22 A</u>	pril 2009					
• • • • • • • • • • • • • • • • • • • •	action is non-final.					
<del>'=</del>						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>23 May 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1.☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date <u>5/23/2006, 5/27/2008</u> . 6) Other:						

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### **DETAILED ACTION**

### Election/Restrictions

1. Applicant's election with traverse of Species I (Fig. 1-6) with claims 1-20 read on in the reply filed on 4/22/2009 is acknowledged. The traversal is that claim 1 is generic to both species, therefore such species requirement should be withdrawn. This is not persuasive since claim 1 has not yet been patented or had allowable subject matters. The requirement deems to be proper and made FINAL. Non-elected Species II are withdrawn from consideration.

# Specification

2. The abstract of the disclosure is objected to because "said holder" in line 2 and "said band" in line 5. Correction is required. See MPEP § 608.01(b).

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. In claim 1, there is insufficient antecedent basis for "the resistance welding" recited in line 1, "the electrode" recited in line 11 and 12, "the workpiece" in line 12 in the claim.

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6. Regarding claim 9, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-9, 14, 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilabarda et al. (US pat. 6,911,616) in view of Nishimura (JP Pat. 05192774).
- 9. Regarding claim 1, Kilabarda et al. discloses a welding gun (Fig. 1) for the resistance welding of workpieces, including a base body 14 (Fig. 1) and a bracket 48 (Fig. 1) on which electrode holders 38b, 48b (Fig. 1) carrying electrode 44 and 52 (Fig. 1) are arranged, wherein at least one electrode holder 38b (Fig. 1) is fastened to an actuating means 34 (Fig. 1) via which the electrode holder 38b (Fig. 1) fastened thereto is displaceable together with one of the electrode 44 (Fig. 1) in the longitudinal direction to a further one of the electrodes 52 (Fig. 1) except for a winding device including a strip is each provided for the protection of the electrodes, which strip is arranged to be displaceable relative to the electrode between the contact surface of the electrode and the workpiece, and wherein the winding device associated with the displaceable

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electrode is connected with the displaceable electrode so as to follow a longitudinal movement of said electrode, wherein the electrode holders and the electrodes comprise means for guiding the strip from the winding device axially along the electrode holder to the electrode and again axially along the electrode holder back to the winding device. However, Nishimura teaches an electrode protective device for resistance spot welding with the winding devices 22, 23, 52, and 53 (Fig. 3 and 4) including a strip 21(Fig. 1) and 51 (Fig. 2) is each provided for the protection of the electrode 5 and 7 (Fig. 1), the strip is arranged to be displaceable relative to the electrode between the contact surface of the electrode and the workpiece 10 (Fig. 8) and the winding device 22, 23, 52, and 53 (Fig. 3 and 4) associated with the displaceable electrode 5 and 7 (Fig. 1) is connected with the displaceable electrode so as to follow a longitudinal movement of said electrode, wherein the electrode holders 4 and 6 (Fig. 1) and the electrodes 5 and 7 (Fig. 1) comprise means for guiding the strip from the winding device axially along the electrode holder to the electrode and again axially along the electrode holder back to the winding device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Nishimura in order to have a winding device including a strip is each provided for the protection of the electrodes, which strip is arranged to be displaceable relative to the electrode between the contact surface of the electrode and the workpiece, and wherein the winding device associated with the displaceable electrode is connected with the displaceable electrode so as to follow a longitudinal movement of said electrode, wherein the electrode holders and the electrodes comprise means for quiding the strip

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from the winding device axially along the electrode holder to the electrode and again axially along the electrode holder back to the winding device, for the purpose of protecting the electrode tip.

- 10. Regarding claim 2, Kilabarda et al. discloses all the claimed features as set forth above except for the winding device comprises a wind-off roller and a wind-up roller for the guidance of the strip to the electrode and back again to the winding device.

  Nishimura teaches a protection device for electrode in resistance spot welding with the winding device 31 and 61 (Fig. 1) includes a wind-off roller 22 (Fig. 3), 52 (Fig. 4) and a wind-up roller 23 (Fig. 3), 53 (Fig. 4) for the guidance 41 and 71 (Fig. 1) of the strip 21 and 71 (Fig. 1) to the electrode and back again to the winding device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Nishimura in order to have the winding device comprises a wind-off roller and a wind-up roller for the guidance of the strip to the electrode and back again to the winding device, for the purpose of protecting the electrode tip.
- 11. Regarding claim 3, Kilabarda et al. discloses all the claimed features except for the wind-off roller and/or the wind-up roller are coupled with a driving means as set forth above. Nishimura teaches a protection device for electrode in resistance spot welding with a wind-off roller 22 (Fig. 3), 52 (Fig. 4) and a wind-up roller 23 (Fig. 3), 53 (Fig. 4) are couple with the driving mean 6 and 31 (Fig. 1) (Par. 25 and 26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Nishimura in order to have the wind-off

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roller and/or the wind-up roller are coupled with a driving means, for the purpose of protecting the electrode tip.

- 12. Regarding claim 4, Kilabarda et al. discloses all the claimed features except for the driving means is comprised of an electronically controllable motor as set forth above. Nishimura teaches a protection device for electrode in resistance spot welding with the driving mean 6 and 31 (Fig. 1) are driven by the stepping motor 32 and 62 (Fig. 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Nishimura in order to have the driving means is comprised of an electronically controllable motor, for the purpose of protecting the electrode tip.
- 13. Regarding claim 5, Kilabarda et al. discloses all the claimed features as set forth above except for a braking device is provided for the strip to keep the strip tight.

  Nishimura teaches a protection device for electrode in resistance spot welding with the torque sensor 33 and 63 (Fig. 1) are connected with the output shaft 34 and 64 (Fig. 1) of the stepping motor 32 and 62 (Fig. 1). Par. 27-28 further explained the rolling-up of the band to keep it intact with the electrode. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Nishimura in order to have a braking device is provided for the strip to keep the strip tight, for the purpose of protecting the electrode tip.
- 14. Regarding claim 6, Kilabarda et al. discloses all the claimed features as set forth above except for the braking device is controllable by a control device. Nishimura teaches a protection device for electrode in resistance spot welding with the rolling-up

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31 and 61 (Fig. 1) are driven by the stepping motor 32 and 62 (Fig. 5) are controlled by the control mean 81 (Fig.5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the

teaching of Nishimura in order to have for the braking device is controllable by a control

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device, for the purpose of protecting the electrode tip.

- 15. Regarding claim 7, Kilabarda et al. discloses all the claimed features as set forth above except for a winding device is arranged on the bracket mounted on the base body and a winding device is arranged on the actuating means. Nishimura teaches a protection device for electrode in resistance spot welding with the winding device 31 and 61 (Fig. 2) are mounted on the welding Gand 1 (Fig. 2) is attached to the upper limit part of a frame (Par. 14). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Nishimura in order to have a winding device is arranged on the bracket mounted on the base body and a winding device is arranged on the actuating means, for the purpose of protecting the electrode tip.
- 16. Regarding claim 8, Kilabarda et al. further discloses a welding gun (Fig. 1) wherein the bracket 48 (Fig. 1) has a C-shaped configuration.
- 17. Regarding claim 9, Kilabarda et al. further discloses the actuating means 34 is comprised of a hydraulically, pneumatically or electromotorically controllable drive such as, for instance, a cylinder (Col. 2, Lines 58-60).
- 18. Regarding claim 14, Kilabarda et al. discloses all the claim features as set forth above except for a winding device is rigidly arranged on the bracket. Nishimura teaches

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the electrode tip.

a protection device for electrode in resistance spot welding where the wind-off roller 22 (Fig. 3) and a wind-up roller 23 (Fig. 3) are rigidly arranged on the bracket (See Fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Nishimura in order to have a winding device is rigidly arranged on the bracket, for the purpose of protecting

- 19. Regarding claim 16, Kilabarda et al. discloses all the claim features as set forth above except for the winding device is arranged on the bracket on the side opposite the electrode. Nishimura teaches a protection device for electrode in resistance spot welding where the wind-off roller 22 (Fig. 3) and a wind-up roller 23 (Fig. 3) are arranged on the bracket (Fig. 2) on the side and opposite to the electrode (Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Nishimura in order to have the winding device is arranged on the bracket on the side opposite the electrode, for the purpose of protecting the electrode tip.
- 20. Regarding claim 18, Kilabarda et al. further discloses an actuating element 34 (Fig. 1) is arranged on the bracket 20 (Fig. 2), via which the electrode holder 38b (Fig. 1) fastened thereto, together with the electrode 44 (Fig. 1), is displaceable in the longitudinal direction to the further electrode 52 (Fig. 1).
- 21. Regarding claim 19, Kilabarda et al. further discloses the actuating element is comprised of a cylinder 74 (Fig. 1) and a piston as well as a piston rod 76 (Fig. 1)

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positively connected with the former are arranged within the cylinder 74 (Fig. 1) (Col. 2, Lines 58-60).

- 22. Regarding claim 20, Kilabarda et al. further discloses the bracket 48 (Fig. 1) is arranged to be displaceable via an actuating means 34 (Fig. 1) arranged in the base body 14 (Fig. 1).
- 23. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilabarda et al. (US Pat. 6,911,616) in view of Nishimura (JP Pat. 05192774) and further view of Humblot (US Pat. 4,481,401).
- 24. Regarding claim 10, Kilabarda et al. further discloses the cylinder 334 (Fig. 1) is comprised of a cylinder jacket 74 (Fig. 1), a piston and a throughgoing piston rod 76 (Fig. 10) (Col. 2, Lines 58-60) except for the winding device together with the strip is adjustable via the piston and the through going piston rod, respectively. Humblot teaches a process for welding coated plates where the winding devices 53, 54 (Fig. 2) together with the strip 59 (Fig. 2) is adjustable via a piston 3, 4 (Fig. 2) and the through going piston rod (Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Humblot in order to have the winding device together with the strip is adjustable via the piston and the through going piston rod, respectively, for the purpose of protecting the electrode tip.
- 25. Regarding claims 11 and 13, the combined references disclose all the claimed features as set forth above except for the piston rod comprises a guide which is provided axially to the piston rod for guiding the strip. Humblot teaches a process for

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welding coated plates where a guide 72, 73 (Fig. 7) provided axially to the piston rod for guiding the strip 59 (Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Humblot in order to have the piston rod comprises a guide which is provided axially to the piston rod for guiding the strip, for the purpose of protecting the electrode tip.

- 26. Regarding claim 12, the combined references disclose all the claimed features as set forth above except for the winding device is arranged on the piston rod on the side opposite the electrode. Humblot teaches a process for welding coated plates where the winding devices 53 (Fig. 2) is arranged on the piston rod (Fig. 2) on the site opposite the electrode 2 (Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al. the teaching of Humblot in order to have the winding device is arranged on the piston rod on the side opposite the electrode, for the purpose of protecting the electrode tip.
- 27. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilabarda et al. (US Pat. 6,911,616) in view of Nishimura (JP Pat. 05192774) and further view of Eckler et al. (US Pat. 3,015,713).
- 28. Regarding claims 15 and 17, the combined referenced discloses all the claimed features as set forth above except for the bracket comprises a bore provided axially to the electrode for guiding the strip. Eckler et al. teaches an automatic decontamination of welding electrode where the bracket 15 (Fig. 1) comprises a bore provided axially to the electrode 13 (Fig. 1) for guiding the strip 24 (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in the

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combined references the teaching of Eckler et al. in order to have for the bracket comprises a bore provided axially to the electrode for guiding the strip, for the purpose of protecting the electrode tip.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG NGUYEN whose telephone number is (571)270-7828. The examiner can normally be reached on Monday-Friday, 7:30AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG NGUYEN/ Examiner, Art Unit 3742 /TU B HOANG/

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Supervisory Patent Examiner, Art Unit 3742